Chapter 51-50 WAC

STATE BUILDING CODE ADOPTION AND AMENDMENT OF THE ((2006)) 2009 EDITION OF THE INTERNATIONAL BUILDING CODE

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-003 International Building Code. The ((2006)) 2009 edition of the *International Building Code*, including Appendix E, published by the International Code Council is hereby adopted by reference with the exceptions noted in this chapter of the Washington Administrative Code.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-007 Exceptions. The exceptions and amendments to the International Building Code contained in the provisions of chapter 19.27 RCW shall apply in case of conflict with any of the provisions of these rules.

The provisions of this code do not apply to temporary growing structures used solely for the commercial production of horticultural plants including ornamental plants, flowers, vegetables, and fruits. "Temporary growing structure" means a structure that has the sides and roof covered with polyethylene, polyvinyl, or similar flexible synthetic material and is used to provide plants with either frost protection or increased heat retention. A temporary growing structure is not considered a building for purposes of this code.

The provisions of this code do not apply to the construction, alteration, or repair of temporary worker housing except as provided by rule adopted under chapter 70.114A RCW or chapter 37, Laws of 1998 (SB 6168). "Temporary worker housing" means a place, area, or piece of land where sleeping places or housing sites are provided by an employer for his or her employees or by another person, including a temporary worker housing operator, who is providing such accommodations for employees, for temporary, seasonal occupancy, and includes "labor camps" under RCW 70.54.110.

Codes referenced which are not adopted through RCW 19.27.031 or chapter 19.27A RCW shall not apply unless specifically adopted by the authority having jurisdiction. The ((2006)) 2009 International Existing Building Code is ((referenced)) included in the adoption of this code ((as Appendix Chapter M and may be adopted by the authority having jurisdiction in accordance with Section 101.2.1)) in Section 3401.5 and amended in WAC 51-50-480000.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-008 Implementation. The International Building Code adopted under chapter 51-50 WAC shall become effective in all counties and cities of this state on July 1, ((2007)) 2010.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0107 Temporary structures and uses.

((107.1)) <u>108.1</u> General. The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

EXCEPTION:

The building official may authorize unheated tents and yurts under 500 square feet accommodating an R-1 Occupancy for recreational use as a temporary structure and allow them to be used indefinitely.

<u>AMENDATORY SECTION</u> (Amending WSR 08-01-110, filed 12/18/07, effective 4/1/08)

WAC 51-50-0200 Chapter 2--Definitions.

SECTION 202--DEFINITIONS.

ADULT FAMILY HOME. See Section 310.2.

AIR-PERMEABLE INSULATION. An insulation having an air permeance equal to or less than $0.02~\rm L/s-m^2$ at $75~\rm Pa$ pressure differential tested in accordance with ASTM E2178 or ASTM E283.

[2] OTS-2576.7

CHILD DAY CARE. See Section 310.2.

CHILD DAY CARE HOME, FAMILY. See Section 310.2.

NIGHTCLUB. An A-2 Occupancy use under the 2006 International Building Code in which the aggregate area of concentrated use of unfixed chairs and standing space that is specifically designated and primarily used for dancing or viewing performers exceeds three hundred fifty square feet, excluding adjacent lobby areas. "Nightclub" does not include theaters with fixed seating, banquet halls, or lodge halls.

PORTABLE SCHOOL CLASSROOM. See Section 902.1.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. See Section 310.2. This definition is not adopted.

((story. That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above, including basements (also see "Mezzanine" and Section 502.1). It is measured as the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.

story above grade plane. Any story having its finished floor surface entirely above grade plane, except that a basement shall be considered as a story above grade plane where the finished surface of the floor or roof next above the basement is:

- 1. More than 6 feet (1829 mm) above grade plane; or
- 2. More than 12 feet (3658 mm) above the finished ground level at any point.)

<u>AMENDATORY SECTION</u> (Amending WSR 04-01-108, filed 12/17/03, effective 7/1/04)

WAC 51-50-0305 Section 305--Educational Group E.

305.2 Day Care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2 1/2 years of age, shall be classified as a Group E Occupancy.

EXCEPTION:

Family child day care homes licensed by ((the)) Washington state ((department of social and health services)) for the care of twelve or fewer children shall be classified as Group R-3.

WAC 51-50-0308 Section 308--Institutional Group I.

- 308.1 Institutional Group I. Institutional Group I Occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.
- **308.2 Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Residential board and care facilities

Assisted living facilities

Halfway houses

Group homes

Congregate care facilities

Social rehabilitation facilities

Alcohol and drug centers

Convalescent facilities

A facility such as the above with five or fewer persons and adult family homes licensed by ((the)) Washington state ((department of social and health services)) shall be classified as a Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

A facility such as the above_ providing licensed care to clients in one of the categories listed in Section 310.1 ((regulated)) licensed by ((either the)) Washington ((department of health or the department of social and health services)) state shall be classified as Group R-2.

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care ((on a 24-hour basis of more than five)) for persons who are not capable of self-preservation. This group shall include, but not be limited to, the following:

Child care facilities

Detoxification facilities

Hospice care centers

Hospitals

Mental hospitals

Nursing homes ((\frac{\text{(both intermediate-care facilities and skilled nursing facilities)}}

Mental hospitals

Detoxification facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

A facility such as the above providing licensed care to clients in one of the categories listed in Section 310.1 regulated by either the Washington department of health or the department of social and health services shall be classified as Group R-2.))

A facility such as the above providing licensed care to clients in one of the categories listed in Section 310.1 licensed by Washington state shall be classified as Group R-2.

308.3.1 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

<u>child care Facilities.</u> Facilities that provide care on a 24-hour basis to more than five children, 2 1/2 years of age or less, shall be classified as Group I-2.

<u>peroxification facility.</u> Facilities that serve patients who are provided treatment for substance abuse on a 24-hour basis and who are incapable of self-preservation or who are harmful to themselves or others.

HOSPITALS AND MENTAL HOSPITALS. A building or portion thereof used on a 24-hour basis for the medical, psychiatric, obstetrical or surgical treatment of inpatients who are incapable of self-preservation.

NURSING HOMES. Nursing homes are long-term care facilities on a 24-hour basis, including both intermediate care facilities and skilled nursing facilities, serving more than five persons and any of the persons are incapable of self-preservation.

HOSPICE CARE CENTER. A building or portion thereof used on a 24-hour basis for the provision of hospice services to terminally ill inpatients.

308.5.2 Child care facility. A facility that provides supervision and personal care on a less than 24-hour basis for more than five children 2 1/2 years of age or less shall be classified as Group I-4.

EXCEPTIONS:

[5] OTS-2576.7

^{1.} A child day care facility that provides care for more than five but no more than 100 children 2 1/2 years or less of age, ((when)) where the rooms ((where such)) in which the children are cared for are located on ((the)) a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

^{2.} Family child day care homes licensed by ((the)) Washington state ((department of social and health services)) for the care of twelve or fewer children shall be classified as Group R-3.

WAC 51-50-0310 Section 310--Residential Group R.

- 310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the International Residential Code in accordance with Section 101.2. Residential occupancies shall include the following:
- R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient)

Hotels (transient)

Motels (transient)

Congregate living facilities (transient) with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

R-2 Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Boarding houses (not transient)

Boarding homes as licensed by ((department of social and health services)) <u>Washington state</u> under chapter 388-78A WAC

Convents

Dormitories

Fraternities and sororities

Hotels (nontransient)

Live/work units

Monasteries

Motels (nontransient)

Residential treatment facilities as licensed by (($\frac{department}{department}$)) Washington state under chapter 246-337 WAC

Vacation timeshare properties

Congregate living facilities with sixteen or fewer occupants are permitted to comply with the construction requirements for R-3.

R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as <u>Group</u> R-1, R-2, R-4 or I ((and where)), including: Buildings that do not contain more than two dwelling units ((as applicable in Section 101.2, including adult family homes and family child day care homes for the care of twelve or fewer children, licensed by the Washington state department of social and health services, or)). Adult ((and child)) care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours((, or)). Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours. Congregate living facilities with sixteen or fewer persons. Adult ((family homes and

family child day care homes, or adult and child care facilities that are)) care within a single-family home, adult family homes and family child day care homes are permitted to comply with the International Residential Code ((in accordance with Section 101.2)).

Foster family care homes licensed by ((the)) Washington state ((department of social and health services shall be)) are permitted to comply with the *International Residential Code*, as an accessory use to a dwelling, for six or fewer children including those of the resident family.

R-4 classification is not adopted. Any reference in this code to R-4 does not apply.

310.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

ADULT FAMILY HOME ((means)). A dwelling, licensed by Washington state, in which a person or persons provide personal care, special care, room and board to more than one but not more than six adults who are not related by blood or marriage to the person or persons providing the services.

BOARDING HOUSE. A building arranged or used for lodging for compensation, with or without meals, and not occupied as a single family unit.

CHILD DAY CARE $((\frac{1}{1}, \frac{1}{1}))$. For the purposes of these regulations, $((\frac{1}{1}, \frac{1}{1}))$ is the care of children during any period of a 24-hour day.

CHILD DAY CARE HOME, FAMILY ((is)). A child day care facility, licensed by ((the)) Washington state, located in the dwelling of the person or persons under whose direct care and supervision the child is placed, for the care of twelve or fewer children, including children who reside at the home.

congregate Living Facilities. A building or part thereof that contains sleeping units where residents share bathroom and/or kitchen facilities.

DORMITORY. A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.

<u>PERSONAL CARE SERVICE.</u> The care of residents who do not require chronic or convalescent medical or nursing care. Personal care involves responsibility for safety of the resident while inside the building.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. This definition is not adopted.

[7]

TRANSIENT. Occupancy of a dwelling or sleeping unit for not more than 30 days.

NEW SECTION

WAC 51-50-0403 Section 403--High-rise buildings.

403.5.4 Smokeproof exit enclosures. Every required exit stairway serving floors more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access shall comply with Sections 909.20 and 1022.9.

EXCEPTION:

Unless required by other sections of this code, portions of such stairways which extend to serve floors below the level of exit discharge need not comply with Sections 909.20 and 1022.9 provided the portion of the stairway below is separated from the level of exit discharge with a 1 hour fire barrier.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0406 ((Section 406--Motor-vehicle-related occupancies.)) Reserved.

((406.2.6 Floor surface. Parking surfaces shall be of concrete or similar noncombustible and nonabsorbent materials.

EXCEPTION:

Asphalt parking surfaces are permitted at ground level.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0407 ((Section 407-Group I-2.)) Reserved.

- ((407.8 Locks on exit doors. Approved, listed locks without delayed egress shall be permitted in nursing homes or portions of nursing homes, provided that:
- 1. The clinical needs of one or more patients require specialized security measures for their safety.
- 2. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 3. The doors unlock upon loss of electrical power controlling the lock or lock mechanism.

- 4. The lock shall be capable of being deactivated by a signal from a switch located in an approved location.
- 5. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door.))

NEW SECTION

WAC 51-50-0420 Section 420--Groups I-1, R-1, R-2, R-3.

420.4 Subdivision of building spaces--Smoke barriers. Smoke barriers complying with Section 710 shall be installed on floors other than the level of exit discharge of a Group R-2 boarding home or residential treatment facility licensed by Washington state, where a fire-resistance rated corridor is required by Table 1018.1. The smoke barrier shall subdivide the floor into at least two compartments complying with Section 407.4.

NEW SECTION

WAC 51-50-0422 Section 422--Ambulatory health care.

- **422.1 General.** Occupancies classified as ambulatory health care facilities shall comply with the provisions of Sections 422.1 through 422.7 and other applicable provisions of this code by the services provided.
- **422.2 Separation.** Ambulatory health care facilities where four or more care recipients are rendered incapable of self-preservation at any given time shall be separated from adjacent spaces, corridors or tenants with a fire partition installed in accordance with Section 709.
- **422.3 Smoke compartments.** Where the aggregate area of one or more ambulatory health care facility exceeds 10,000 square feet on one story, the story shall be provided with a smoke barrier to subdivide the story into not less than two smoke compartments. Smoke barriers shall be installed in accordance with Section 710. The area of any one such smoke compartment shall not exceed 22,500 square feet (2092 m^2) . The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60,960 mm).

EXCEPTION:

Where the ambulatory health care facility is completely surrounded by the required smoke barrier, such smoke barriers shall not be required to be continuous from an outside wall to outside wall.

422.4 Refuge area. At least 15 net square feet (2.8 m²) per

occupant shall be provided within the aggregate area of corridors, patient rooms, treatment rooms, lounge or dining areas and other low-hazard areas on each side of each smoke barrier. Each ambulatory health care facility shall be provided with access to the required refuge areas without passing through or utilizing adjacent tenant spaces.

- **422.5 Independent egress.** A means of egress shall be provided from each smoke compartment created by smoke barriers without having to return through the smoke compartment from which means of egress originated.
- **422.6 Automatic sprinkler systems.** Automatic sprinkler systems shall be provided for ambulatory care facilities in accordance with Section 903.2.2.
- **422.7 Fire alarm systems.** A fire alarm system shall be provided for ambulatory health care facilities in accordance with Section 907.2.2.1.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0502 ((Section 502--Definitions.)) Reserved.

((502.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

plane (see "Story above grade plane" in Section 202). A basement shall be considered as a story above grade plane where the finished surface of the floor or roof next above the basement is:

- 1. More than 6 feet (1829 mm) above grade plane; or
- 2. More than 12 feet (3658 mm) above the finished ground level at any point.

story. That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above, including basements (also see "Basement" and "Mezzanine").))

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0506 Building area modifications.

((506.1.1 Basements. Basements below the first story above grade

plane need not be included in the total allowable area provided each such basement does not exceed the area permitted for a building with no more than one story above grade plane.))

506.4 Single occupancy buildings with more than one story. The total allowable building area of a single occupancy building with more than one story above grade plane shall be determined in accordance with this section. The actual aggregate building area at all stories in the building shall not exceed the total allowable building area.

EXCEPTION:

Basements below the first story above grade plane need not be included in the total allowable building area, provided each basement does not exceed the area permitted for a building with no more than one story above grade plane.

506.5 Mixed occupancy area determination. The total allowable building area for buildings containing mixed occupancies shall be determined in accordance with the applicable provisions of this section. Basements below the first story above grade plane need not be included in the total allowable building area, provided each such basement does not exceed the area permitted for a building with no more than one story above grade plane.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0509 ((Section 509--Special provisions.)) Reserved.

((509.2 Group S-2 enclosed or open parking garage with Group A, B, M, R or S above. A building shall be considered as two separate and distinct buildings for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction, where all of the following conditions are met:

- 1. The buildings are separated with a horizontal assembly having a minimum 3-hour fire-resistance rating.
- 2. The building below the horizontal assembly is no more than one story above grade plane.
- 3. The building below the horizontal assembly is of Type IA construction.
- 4. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Table 715.4.

EXCEPTION:

Where the enclosure walls below the horizontal assembly have not less than a 3-hour fire-resistance rating with opening protectives in accordance with Table 715.4, the enclosure walls extending above the horizontal assembly shall be permitted to have a 1-hour fire-resistance rating, provided:

- 1. The building above the horizontal assembly is not required to be of Type I construction,
- 2. The enclosure connects less than four stories, and
- 3. The enclosure opening protectives above the horizontal assembly have a minimum 1-hour fire-protection rating.

5. The building above the horizontal assembly shall be

permitted to have multiple Group A uses each with an occupant load of less than 300, or Group B, M, R or S uses;

6. The building below the horizontal assembly is a Group S-2 enclosed or open parking garage, used for the parking and storage of private motor vehicles.

EXCEPTIONS:

- 1. Entry lobbies, mechanical rooms and similar uses incidental to the operation of the building shall be permitted.
 2. Multiple Group A uses, each with an occupant load of less than 300, or Group B or M uses shall be permitted in addition to those uses incidental to the operation of the building (including storage areas), provided that the entire structure below the horizontal assembly is protected throughout by an approved automatic sprinkler system.
- 7. The maximum building height in feet shall not exceed the limits set forth in Section 503 for the building having the smaller allowable height as measured from grade plane.
- 509.3 Group S-2 enclosed parking garage with Group S-2 open parking garage above. A Group S-2 enclosed parking garage with no more than one story above grade plane and located below a Group S-2 open parking garage shall be classified as a separate and distinct building for the purpose of determining the type of construction where the following conditions are met:
- 1. The allowable area of the building shall be such that the sum of the ratios of the actual area divided by the allowable area for each separate occupancy shall not exceed 1.0.
- 2. The Group S-2 enclosed parking garage is of Type I or II construction and is at least equal to the fire-resistance requirements of the Group S-2 open parking garage.
- 3. The height and number of tiers of the Group S-2 open parking garage shall be limited as specified in Table 406.3.5.
- 4. The floor assembly separating the Group S-2 enclosed parking garage and Group S-2 open parking garage shall be protected as required for the floor assembly of the Group S-2 enclosed parking garage. Openings between the Group S-2 enclosed parking garage and Group S-2 open parking garage, except exit openings, shall not be required to be protected.
- 5. The Group S-2 enclosed parking garage is used exclusively for the parking or storage of private motor vehicles, but shall be permitted to contain an office, waiting room and toilet room having a total area of not more than 1,000 square feet (93 m²), and mechanical equipment rooms incidental to the operation of the building.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0707 Section ((707)) 708--Shaft enclosures.

((707.14.2 Enclosed elevator lobby pressurization alternative. Where elevator hoistway pressurization is provided in lieu of required enclosed elevator lobbies, the pressurization system shall comply with this section.

- 707.14.2.1 Pressurization requirements. Elevator hoistways shall be pressurized to maintain a minimum positive pressure of 0.10 inches of water column with respect to adjacent occupied space on all floors and a maximum pressure so as to not prevent the automatic operation of the elevator doors, as well as accounting for the stack and wind effect expected on the mean low temperature January day. This pressure shall be measured at the midpoint of each hoistway door, with all hoistway doors open at the designated primary recall level and all other hoistway doors closed. The supply air intake shall be from an outside, uncontaminated source located a minimum distance of 20 feet from any air exhaust system or outlet.
- 707.14.2.2 Ducts for system. Any duct system that is part of the pressurization system shall be protected with the same fire-resistance rating as required for the elevator shaft enclosure.
- 707.14.2.3 Fan system. The fan system provided for the pressurization system shall be as required by this section.
- 707.14.2.3.1 Fire resistance. When located within the building, the fan system that provides the pressurization shall be protected with the same fire-resistance rating required for the elevator shaft enclosure.
- 707.14.2.3.2 Smoke detection. The fan system shall be equipped with a smoke detector that will automatically shut down the fan system when smoke is detected within the system.
- 707.14.2.3.3 Separate systems. A separate fan system shall be used for each bank of elevators.
- 707.14.2.3.4 Fan capacity. The supply fan shall either be adjustable with a capacity of at least 1000-cfm (.4719 m³/s) per door, or that specified by a registered design professional to meet the requirements of a designed pressurization system.
- 707.14.2.4 Standby power. The pressurization system shall be provided with standby power from the same source as other required emergency systems for the building.
- 707.14.2.5 Activation of pressurization system. The elevator pressurization system shall be activated upon activation of the building fire alarm system or upon activation of the elevator lobby smoke detectors.
- 707.14.2.6 Elevator doors. Each elevator door shall operate properly when hoistway pressurization is in effect.
- 707.14.2.7)) 708.14.2.12 Hoistway venting. Hoistway venting required by Section 3004 need not be provided for pressurized elevator shafts.
- ((707.14.2.8)) 708.14.2.13 Machine rooms. Elevator machine rooms shall be pressurized in accordance with this section unless separated from the hoistway shaft by construction in accordance with Section 707.

((707.14.2.9 Special inspection. Special inspection for performance shall be required in accordance with Section 909.18.8. System acceptance shall be in accordance with Section 909.19.))

NEW SECTION

WAC 51-50-0710 Section 710--Smoke barriers.

710.4 Continuity. Smoke barriers shall form an effective membrane continuous from outside wall to outside wall and from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, deck or slab above, including continuity through concealed spaces, such as those found above suspended ceiling, and interstitial structural and mechanical spaces. The supporting construction shall be protected to afford the required fire-resistance rating of the wall or floor supported in buildings of other than Type IIB, IIIB, or VB construction.

EXCEPTIONS:

- 1. Smoke-barrier walls are not required in interstitial spaces where such spaces are designed and constructed with ceilings that provide resistance to the passage of fire and smoke equivalent to that provided by the smoke-barrier walls.
- 2. Smoke barriers provided to enclose areas of refuge as required by Section 1007.6 are not required to extend from outside wall to outside wall.

<u>AMENDATORY SECTION</u> (Amending WSR 08-01-110, filed 12/18/07, effective 4/1/08)

WAC 51-50-0903 Section 903--Automatic sprinkler systems.

903.2.1.6 Nightclub. An automatic sprinkler system shall be provided throughout Group A-2 nightclubs as defined in this code. An existing nightclub constructed prior to July 1, 2006, shall be provided with automatic sprinklers not later than December 1, 2009.

((903.2.2)) <u>903.2.3</u> **Group E.** An automatic sprinkler system shall be provided for Group E Occupancies.

EXCEPTIONS:

- 1. Portable school classrooms, provided aggregate area of any cluster or portion of a cluster of portable school classrooms does not exceed 5,000 square feet (1465 m^2); and clusters of portable school classrooms shall be separated as required (($\frac{1}{1000} + \frac{1}{1000} + \frac{1}{1000}$
- 2. Group E occupancies with an occupant load of 50 or less, calculated in accordance with Table 1004.1.1.

((903.2.7)) <u>903.2.8</u> Group R. An automatic fire sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

EXCEPTION:

Group R-1 if all of the following conditions apply:

- 1. The Group R fire area is no more than 500 square feet and is used for recreational use only.
- 2. The Group R fire area is only one story.

[14] OTS-2576.7

- 3. The Group R fire area does not include a basement.
- 4. The Group R fire area is no closer than 30 feet from another structure.
- 5. Cooking is not allowed within the Group R fire area.
- 6. The Group R fire area has an occupant load of no more than 8.
- 7. A hand held (portable) fire extinguisher is in every Group R fire area.

NEW SECTION

WAC 51-50-0907 Section 907--Fire alarm and detection systems.

- [F] 907.2.8 Group R-1. Fire alarm systems, smoke alarms and carbon monoxide alarms shall be installed in Group R-1 occupancies as required in Sections 907.2.8.1 through 907.2.8.4.
- [F] 907.2.8.4. Carbon monoxide alarms. For new construction, an approved carbon monoxide alarm shall be installed by January 1, 2011, outside of each separate sleeping area in the immediate vicinity of the bedroom in sleeping units. In a building where a tenancy exists, the tenant shall maintain the CO alarm as specified by the manufacturer including replacement of the batteries.
- [F] 907.2.8.4.1 Existing sleeping units. Existing sleeping units shall be equipped with carbon monoxide alarms by July 1, 2011.
- [F] 907.2.8.4.2 Alarm requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.
- [F] 907.2.9 Group R-2. Fire alarm systems, smoke alarms and carbon monoxide alarms shall be installed in Group R-2 occupancies as required in Sections 907.2.9.1 through 907.2.9.3.
- [F] 907.2.9.3. Carbon monoxide alarms. For new construction, an approved carbon monoxide alarm shall be installed by January 1, 2011, outside of each separate sleeping area in the immediate vicinity of the bedroom in dwelling units. In a building where a tenancy exists, the tenant shall maintain the CO alarm as specified by the manufacturer including replacement of the batteries.
- [F] 907.2.9.3.1 Existing dwelling units. Existing dwelling units shall be equipped with carbon monoxide alarms by July 1, 2011.
- 907.2.9.3.2 Alarm requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.
- [F]907.2.10 Group R-3. Carbon monoxide alarms shall be installed in Group R-3 occupancies as required in Sections 907.2.10.1 through 907.2.10.3.

- [F]907.2.10.1 Carbon monoxide alarms. For new construction, an approved carbon monoxide alarm shall be installed by January 1, 2011, outside of each separate sleeping area in the immediate vicinity of the bedroom in dwelling units. In a building where a tenancy exists, the tenant shall maintain the CO alarm as specified by the manufacturer including replacement of the batteries.
- [F]907.2.10.2 Existing dwelling units. Existing dwelling units shall be equipped with carbon monoxide alarms by July 1, 2011.

EXCEPTION: Owner-occupied Group R-3 residences legally occupied prior to July 1, 2010.

[F]907.2.10.3 Alarm requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-0909 Section 909--Smoke control systems.

- **909.6.3 Elevator shaft pressurization.** Where elevator shaft pressurization is required to comply with Exception 6 of Section ((707.14.1)) 708.14.1, the pressurization system shall comply with and be maintained in accordance with ((707.14.2)) 708.14.2.
- **909.6.3.1 Activation.** The elevator shaft pressurization system shall be activated by a fire alarm system which shall include smoke detectors or other approved detectors located near the elevator shaft on each floor as approved by the building official and fire code official. If the building has a fire alarm panel, detectors shall be connected to, with power supplied by, the fire alarm panel.
- **909.6.3.2 Power system.** The power source for the fire alarm system and the elevator shaft pressurization system shall be in accordance with Section 909.11.

NEW SECTION

WAC 51-50-0911 Section 911--Fire command center.

911.1.2 Separation. The fire command center shall be separated from the remainder of the building by not less than a 2-hour fire barrier constructed in accordance with Section 707 or horizontal assembly constructed in accordance with Section 712, or both.

NEW SECTION

WAC 51-50-1007 Section 1007--Accessible means of egress.

1007.1 Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1015.1 or 1021.1 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

EXCEPTIONS:

- 1. Accessible means of egress are not required in alterations to existing buildings.
- 2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5.
- 3. In assembly areas with sloped or stepped aisles, one accessible means of egress is permitted where the common path of travel is accessible and meets the requirements in Section 1028.8.
- 4. In parking garages, accessible means of egress are not required to serve parking areas that do not contain accessible parking spaces.
- 1007.8 Two-way communication. A two-way communication system shall be provided at the elevator landing on each accessible floor that is one or more stories above or below the story of exit discharge complying with Sections 1007.8.1 and 1007.8.2.

EXCEPTIONS:

- 1. Two-way communication systems are not required at the elevator landing where two-way communication is provided within the areas of refuge in accordance with section 1007.6.3.
- 2. Two-way communication systems are not required on floors provided with exit ramps conforming to provisions of section 1010.

1007.8.1 System requirements. Two-way communication systems shall provide communication between each required location and the fire command center or a central control point location approved by the fire department. Where the central control point is not constantly attended, a two-way communication system shall have a timed automatic telephone dial-out capability to a monitoring location. The two-way communication system shall include both audible and visible signals. The two-way communication system shall have a battery backup or an approved alternate source of power that is capable of 90 minutes use upon failure of the normal power source.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1008 Section 1008--Doors, gates and turnstiles.

((1008.1.2 Door swing. Egress doors shall be side-hinged swinging.

EXCEPTIONS:

- 1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
- 2. Group I-3 Occupancies used as a place of detention.
- 3. Critical or intensive care patient rooms within suites of health care facilities.
- 4. Doors within or serving a single dwelling unit in Groups R-2 and R-3.
- 5. In other than Group II Occupancies, revolving doors complying with Section 1008.1.3.1.
- 6. In other than Group II Occupancies, horizontal sliding doors complying with Section 1008.1.3.3 are permitted as a means of egress.
- 7. Power-operated doors in accordance with Section 1008.1.3.2.
- 8. Doors serving a bathroom within an individual sleeping unit in Group R-1.

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H Occupancy.

The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. For other side-swinging, sliding, and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15-pound (67 N) force. Forces shall be applied to the latch side.))
1008.1.9.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

- 1. Places of detention or restraint.
- 2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
 - 2.1 The locking device is readily distinguishable as locked;
- 2.2 A readily visible sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background; and
- 2.3 The use of the key-operated locking device is revocable by the building official for due cause.
- 3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware.
- 4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or a tool.
- 5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
- 6. Approved, listed locks without delayed egress shall be permitted in Group R-2 boarding homes licensed by Washington state, provided that:
- 6.1. The clinical needs of one or more patients require specialized security measures for their safety.
- 6.2. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 6.3. The doors unlock upon loss of electrical power controlling the lock or lock mechanism.
- 6.4. The lock shall be capable of being deactivated by a signal from a switch located in an approved location.
- 6.5. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to

- exit. Instructions for exiting shall be posted within six feet of the door.
- 1008.1.9.6 Special locking arrangements in Group I-2. Approved locks shall be permitted in a Group I-2 Occupancy where the clinical needs of persons receiving care require such locking. Locks shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below.
- 1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 2. The doors unlock upon loss of power controlling the lock or lock mechanism.
- 3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.
- 4. The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
- 5. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door.
 - 6. Emergency lighting shall be provided at the door.

EXCEPTION:

Items 1, 2, 3, and 5 shall not apply to doors to areas where persons which because of clinical needs require restraint or containment as part of the function of a Group I-2 mental hospital provided that all clinical staff shall have the keys, codes or other means necessary to operate the locking devices.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1009 Section 1009--Stairways and handrails.

((1009.12)) 1009.15 Stairways in individual dwelling units. Stairs or ladders within an individual dwelling unit used for access to areas of 200 square feet (18.6 m²) or less, and not containing the primary bathroom or kitchen, are exempt from the requirements of Section 1009.

NEW SECTION

WAC 51-50-10100 Section 1010--Ramps.

1010.1 Scope. The provisions of this section shall apply to ramps used as a component of a means of egress.

EXCEPTIONS:

- 1. Other than ramps that are part of the accessible routes providing access in accordance with Sections 1108.2 through 1108.2.4 and 1108.2.6, ramped aisles within assembly rooms or spaces shall conform with the provisions in Section 1028.11.
- 2. Curb ramps shall comply with ICC A117.1.
- 3. Vehicle ramps in parking garages for pedestrian exit access shall not be required to comply with Sections 1010.3 through 1010.9 when they are not an accessible route serving accessible parking spaces or other required accessible elements.
- 4. In a parking garage where one accessible means of egress serving accessible parking spaces or other accessible elements is provided, a second accessible means of egress serving that area may include a vehicle ramp that does not comply with Sections 1010.4, 1010.5, and 1010.8. A landing complying with Sections 1010.6.1 and 1010.6.4 shall be provided at any change of direction in the accessible means of egress.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1014 Exit access.

1014.2.2 Group I-2. ((Habitable rooms or suites in Group I-2 occupancies shall have an exit access door leading directly to a corridor.

EXCEPTION: R

Rooms with exit doors opening directly to the outside at ground level.))

- General. Habitable spaces and suites in Group I-2 occupancies are permitted to comply with this Section 1014.2.2.
- 1014.2.2.1 ((Definition. For the purposes of this section, a suite is defined as a cluster of rooms or spaces sharing common circulation. Partitions within a suite are not required to have smoke or fire-resistance-rated construction unless required by another section of this Code.
- 1014.2.3)) Exit access doors. Habitable spaces and suites in Group I-2 occupancies shall have an exit access door leading directly to a corridor.

EXCEPTION: Rooms with ex

Rooms with exit doors opening directly to the outside at ground level.

- 1014.2.2.2 Exit access through suites. Exit access from areas not classified as a Group I-2 Occupancy suite shall not pass through a suite. In a suite required to have more than one exit, one exit access may pass through an adjacent suite if all other requirements of Section 1014.2 are satisfied.
- 1014.2.2.3 Separation. Suites in Group I-2 Occupancies shall be separated from other portions of the building by a smoke partition complying with Section 711. Partitions within suites are not required to be smoke-resistant or fire-resistance-rated unless

- required by another section of this Code.
- 1014.2.2.4 Suites ((in)) containing patient sleeping areas. Patient sleeping areas in Group I-2 Occupancies shall be permitted to be divided into suites with one intervening room if one of the following conditions is met:
- 1. The intervening room within the suite is not used as an exit access for more than eight patient beds.
- 2. The arrangement of the suite allows for direct and constant visual supervision by nursing personnel.
- ((1014.2.3.1)) <u>1014.2.2.4.1</u> Area. Suites of sleeping rooms shall not exceed 5,000 square feet (465 m²).
- ((1014.2.3.2)) 1014.2.2.4.2 Exit access. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet (93 m²) shall have at least two exit access doors ((remotely)) located $((from\ each\ other))$ in accordance with Section 1015.2.
- ((1014.2.3.3)) 1014.2.2.4.3 Travel distance. The travel distance between any point in a suite of sleeping rooms and an exit access door of that suite shall not exceed 100 feet (30,480 mm). The travel distance between any point in a Group I-2 Occupancy patient sleeping room and an exit access door in that room shall not exceed 50 feet (15,240 mm).
- (($\frac{1014.2.4}{}$)) $\frac{1014.2.2.5}{}$ Suites ($\frac{1014.2.2.5.1}{}$) $\frac{1014.2.2.5.1}{}$ through $\frac{1014.2.2.5.4}{}$.
- ((1014.2.4.1)) 1014.2.2.5.1 Area. Suites of rooms, other than patient sleeping rooms, shall not exceed 10,000 square feet (929 m^2).
- ((1014.2.4.2)) <u>1014.2.2.5.2</u> **Exit access**. Any rooms or suite of rooms, other than patient sleeping rooms, of more than 2,500 square feet (232 m²) shall have at least two exit access doors ((remotely)) located ((from each other)) in accordance with Section 1015.2.
- ((1014.2.4.3)) 1014.2.2.5.3 One intervening room. For rooms other than patient sleeping rooms, suites of rooms are permitted to have one intervening room if the travel distance within the suite to the exit access door is not greater than 100 feet (30,480 mm).
- ((1014.2.4.4)) 1014.2.2.5.4 Two intervening rooms. For rooms other than patient sleeping rooms located within a suite, exit access travel from within the suite shall be permitted through two intervening rooms where the travel distance to the exit access door is not greater than 50 feet (15,240 mm).
- ((1014.2.5 Travel distance. The travel distance between any point in a Group I-2 Occupancy patient room and an exit access door in that room shall not exceed 50 feet (15,240 mm).

1014.2.6 Separation. Suites in Group I-2 Occupancies shall be separated from other portions of the building by a smoke partition complying with Section 710.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1015 ((Exit and exit access doorways.)) Reserved.

((1015.1 (IFC 1015.1) Exits or exit access doorways from spaces. Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

1. The occupant load of the space exceeds one of the values in Table 1015.1.

EXCEPTION:

One means of egress is permitted within and from dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

2. The common path of egress travel exceeds one of the limitations of Section 1014.3.

3. Where required by Sections 1015.3, 1015.4, 1015.5, 1015.6 or 1015.6.1.

EXCEPTION:

Group I-2 occupancies shall comply with Section 1014.2.2.

TABLE 1015.1 (IFC 1015.1) SPACES WITH ONE MEANS OF EGRESS

	MAXIMUM
OCCUPANCY	OCCUPANT LOAD
A, B, E^{a}, F, M, U	49
II-1, II-2, II-3	3
H-4, H-5, I-1, I-3, I-4, R	10
\$	29

a. Day care maximum occupant load is 10.

1015.1.1 (IFC 1015.1.1) Three or more exits or exit access doorways. Three exits or exit access doorways shall be provided from any space with an occupant load of 501-1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000.))

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1017 Section 1018--Corridors.

((1017.1 Construction. Corridors shall be fire-resistance rated in accordance with Table 1017.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 for fire partitions.

EXCEPTIONS:

- 1. A fire-resistance rating is not required for corridors in an occupancy in Group E where each room that is used for instruction has at least one door directly to the exterior and rooms for assembly purposes have at least one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
- 2. A fire-resistance rating is not required for corridors contained within a dwelling or sleeping unit in an occupancy in Group R.
- 3. A fire-resistance rating is not required for corridors in open parking garages.
- 4. A fire-resistance rating is not required for corridors in an occupancy in Group B which is a space requiring only a single means of egress complying with Section 1015.1.
- 5. In Group R-2 boarding homes and residential treatment facilities licensed by Washington state, rest areas constructed as required for corridors shall be allowed to be open to the corridor provided:
- 5.1 The area does not exceed 150 square feet, excluding the corridor width;
- 5.2 The floor is separated into at least two compartments complying with Section 407.4;
- 5.3 Combustible furnishings located within the rest area shall be in accordance with the International Fire Code section 805;
- 5.4 Emergency means of egress lighting is provided as required by Section 1006 to illuminate the area.

1017.4)) 1018.5 Air movement in corridors. Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts.

EXCEPTIONS:

- 1. Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, smoking lounges and janitor closets, shall be permitted provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor.
- 2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.
- 3. Where located within tenant spaces of one thousand square feet (93 m²) or less in area, utilization of corridors for conveying return air is permitted.
- 4. Incidental air movement from pressurized rooms within health care facilities, provided that a corridor is not the primary source of supply or return to the room.
- 5. Where such air is part of an engineered smoke control system.
- ((5. Make up or relief air in corridors of Group 1-2 Occupancies.))
- 6. <u>Air supplied to corridors serving residential occupancies shall not</u> be ((permitted to be supplied without specific mechanical exhaust)) <u>considered as providing ventilation air to the dwelling units</u> subject to the following:
- 6.1 The ((supply)) air supplied to the corridor is one hundred percent outside air; and
- 6.2 The units served by the corridor have conforming ventilation <u>air</u> independent of the air supplied to the corridor; and
- 6.3 For other than high-rise buildings, the supply fan will automatically shut off upon activation of corridor smoke detectors which shall be spaced at no more than thirty feet (9,144 mm) on center along the corridor; or
- 6.4 For high-rise buildings, corridor smoke detector activation will close required smoke/fire dampers at the supply inlet to the corridor at the floor receiving the alarm.

((1017.6 Subdivision of building spaces--Smoke barriers. Smoke barriers complying with Section 709 shall be installed on floors other than the level of exit discharge of a Group R-2 boarding home or residential treatment facility licensed by Washington state, where a fire-resistance rated corridor is required by Table 1017.1. The smoke barrier shall subdivide the floor into at least two compartments complying with Section 407.4.)) 1018.6 Corridor continuity. Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms.

EXCEPTIONS:

- 1. Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.
- 2. In Group R-2 boarding homes and residential treatment facilities licensed by Washington state, seating areas shall be allowed to be open to the corridor provided:

- 2.1 The seating area is constructed as required for the corridor;
- 2.2 The floor is separated into at least two compartments complying with Section 407.4;
- 2.3 Each individual seating area does not exceed 150 square feet, excluding the corridor width;
- 2.4 The combined total space of seating areas per compartment does not exceed 300 square feet, excluding the corridor width;
- 2.5 Combustible furnishings located within the seating area shall be in accordance with the International Fire Code Section 805; and
- 2.6 Emergency means of egress lighting is provided as required by Section 1006 to illuminate the area.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1019 ((Number of exits and continuity.)) Reserved.

((1019.1 (IFC 1019.1) Exits from stories. All spaces within each story shall have access to the minimum number of exits as specified in Table 1019.1 based on the occupant load of the story, except as modified in Section 1019.2. For the purposes of this chapter, occupied roofs shall be provided with exits as required for stories. The required number of exits from any story, including basements, shall be maintained until arrival at grade or the public way.

EXCEPTION:

One means of egress is permitted within and from dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

TABLE 1019.1 (IFC 1019.1) MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD

OCCUPANT LOAD (persons per story)	MINIMUM NUMBER OF EXITS (per story)
1-500	2
501-1,000	3
More than 1,000	4

1019.2 (IFC 1019.2) Buildings with one exit. Only one exit shall be required in buildings as specified below:

1. Buildings meeting the limitations of Table 1019.2, provided the building has not more than one level below the first story above grade plane.

- 2. Buildings of Group R-3 Occupancy.
- 3. Single-level buildings with occupied spaces at the level of exit discharge provided each space complies with Section 1015.1 as a space with one exit or exit access doorway.

TABLE 1019.2 (IFC 1019.2) BUILDINGS WITH ONE EXIT

OCCUPANCY	MAXIMUM HEIGHT OF BUILDING ABOVE GRADE PLANE	MAXIMUM OCCUPANTS (OR DWELLING UNITS) PER FLOOR AND TRAVEL DISTANCE
A, B ^t , E ^t , F, M, U	1 Story	49 occupants and 75 feet travel distance
H-2, H-3	1 Story	3 occupants and 25 feet travel distance
H-4, H-5, I, R	1 Story	10 occupants and 75 feet travel distance
S ™	1 Story	29 occupants and 100 feet travel distance
B ^t , F, M, S ^z	2 Stories	30 occupants and 75 feet travel distance
R-2	2 Stories ^r	4 dwelling units and 50 feet travel distance

For IS: 1 foot = 304.8 mm.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1106 Section 1106--Parking and passenger loading facilities.

1106.3 Group (($\overline{I-1}$ and)) I-2 outpatient facilities. Ten percent, but not less than one, of patient and visitor parking spaces provided to serve Group (($\overline{I-1}$ and)) I-2 outpatient facilities shall be accessible.

((1106.4 Rehabilitation facilities and outpatient physical therapy facilities. Twenty percent, but not less than one, of the portion of patient and visitor parking spaces serving rehabilitation facilities specializing in treating conditions that affect mobility

a. For the required number of exits for open parking structures, see Section 1019.1.1.

b. For the required number of exits for air traffic control towers, see Section 412.1.

e. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1026 shall have a maximum height of three stories above grade plane.

d. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 with an occupancy in Group B shall have a maximum travel distance of 100 feet.

e. Day care maximum occupant load is 10.))

and outpatient physical therapy facilities shall be accessible.))

1106.6 Location. Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance. In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance to the parking facility. Where buildings have multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. Wherever practical, the accessible route shall not cross lanes of vehicular traffic. Where crossing traffic lanes is necessary, the route shall be designated and marked as a crosswalk.

EXCEPTION:

- 1. In multilevel parking structures, van accessible parking spaces are permitted on one level.
- 2. Accessible parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee and user convenience.

AMENDATORY SECTION (Amending WSR 04-01-108, filed 12/17/03, effective 7/1/04)

WAC 51-50-1203 Section 1203--Ventilation.

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *International Mechanical Code* ((and the Washington State Ventilation and Indoor Air Quality Code)).

1203.2 Attic spaces. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof framing members shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. A minimum of 1 inch (25 mm) of airspace shall be provided between the insulation and the roof sheathing. The net free ventilating area shall not be less than 1/150th of the area of the space ventilated, with 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

EXCEPTIONS:

- 1. The minimum required net free ventilating shall be 1/300 of the area of the space ventilated, provided a vapor retarder having a transmission rate not exceeding one perm in accordance with ASTM E 96 is installed on the warm side of the attic insulation and provided 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated is at least 3 feet (914 mm) above eave or cornice vents, with the balance of the required ventilation provided by eave or cornice vents.
- 2. Unvented attic assemblies (spaces between the ceiling joists of the top story and the roof rafters) shall be permitted if all the following conditions are met:
- $\underline{2.1 \text{ The unvented attic space is completely contained within the building thermal envelope.}}$
- 2.2 No interior vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly.

- 2.3 Where wood shingles or shakes are used, a minimum 1/4 inch (6 mm) vented air space separates the shingles or shakes and the roofing underlayment above the structural sheathing.
- 2.4 Any air-impermeable insulation shall be a vapor retarder, or shall have a vapor retarder coating or covering in direct contact with the underside of the insulation.
- 2.5 Either items a, b, or c below shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing.
- a. Air-impermeable insulation only. Insulation shall be applied in direct contact to the underside of the structural roof sheathing.
- b. Air-permeable insulation only. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing as specified per WA Climate Zone for condensation control.
- i. Climate Zone #1 R-10 minimum rigid board or air-impermeable insulation R-value.
- ii. Climate Zone #2 R-25 minimum rigid board or air-impermeable insulation R-value.
- c. Air-impermeable and air-permeable insulation. The air-impermeable insulation shall be applied in direct contact to the underside of the structural roof sheathing as specified per WA Climate Zone for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation.
- i. Climate Zone #1 R-10 minimum rigid board or air-impermeable insulation R-value.
- ii. Climate Zone #2 R-25 minimum rigid board or air-impermeable insulation R-value.
- 1203.4 Natural ventilation. For other than Group R Occupancies ((in buildings four stories and less)), natural ventilation of an occupied space shall be through windows, doors, louvers or other openings to the outdoors. The operating mechanism for such openings shall be provided with ready access so that the openings are readily controllable by the building occupants. Group R Occupancies ((in buildings four stories and less)) shall comply with the ((Washington State Ventilation and Indoor Air Quality Code)) International Mechanical Code.
- 1203.6 Radon resistive construction standards. The criteria of this section establishes minimum radon resistive construction requirements for Group R Occupancies.
- 1203.6.1 Application. The requirements of Section 1203.6 shall be adopted and enforced by all jurisdictions of the state according to the following subsections.
- 1203.6.1.1 All jurisdictions of the state shall comply with Section 1203.6.2.
- 1203.6.1.2 Clark, Ferry, Okanogan, Pend Oreille, Skamania, Spokane, and Stevens counties shall also comply with Section 1203.6.3.
- 1203.6.2 State wide radon requirements.
- 1203.6.2.1 Crawlspaces. All crawlspaces shall comply with the requirements of this section.
- 1203.6.2.2 Ventilation. All crawlspaces shall be ventilated as specified in Section 1203.3.
- If the installed ventilation in a crawlspace is less than one square foot for each 300 square feet of crawlspace area, or if the crawlspace vents are equipped with operable louvers, a radon vent shall be installed to originate from a point between the ground cover and soil. The radon vent shall be installed in accordance with Sections 1203.6.3.2.6 and 1203.6.3.2.7.
- 1203.6.2.3 Crawlspace plenum systems. In crawlspace plenum systems used for providing supply air for an HVAC system, aggregate, a permanently sealed soil gas retarder membrane and a radon vent pipe shall be installed in accordance with Section 1203.6.3.2.

Crawlspaces shall not be used for return air plenums.

In addition, an operable radon vent fan shall be installed and activated. The fan shall be located as specified in Section 1203.6.3.2.7. The fan shall be capable of providing at least 100 cfm at 1-inch water column static pressure. The fan shall be controlled by a readily accessible manual switch. The switch shall be labeled "RADON VENT FAN."

1203.6.3 Radon prescriptive requirements.

1203.6.3.1 Scope. This section applies to those counties specified in Section 1203.6.1.2. This section establishes prescriptive construction requirements for reducing the potential for radon entry into all Group R Occupancies, and for preparing the building for future mitigation if desired.

In all crawlspaces, except crawlspace plenums used for providing supply air for an HVAC system, a continuous air barrier shall be installed between the crawlspace area and the occupied area to limit air transport between the areas. If a wood sheet subfloor or other material is utilized as an air barrier, in addition to the requirements of Section 502.1.6.2 of the Washington State Energy Code, all joints between sheets shall be sealed.

1203.6.3.2 Floors in contact with the earth.

1203.6.3.2.1 General. Concrete slabs that are in direct contact with the building envelope shall comply with the requirements of this section.

EXCEPTION: Concrete slabs located under garages or other than Group R Occupancies need not comply with this chapter.

1203.6.3.2.2 Aggregate. A layer of aggregate of 4-inch minimum thickness shall be placed beneath concrete slabs. The aggregate shall be continuous to the extent practical.

1203.6.3.2.3 Gradation. Aggregate shall:

- 1. Comply with ASTM Standard C-33 Standard Specification for Concrete Aggregate and shall be size No. 8 or larger size aggregate as listed in Table 2, Grading Requirements for Course Aggregate; or
- 2. Meet the 1988 Washington State Department of Transportation Specification 9-03.1 (3) "Coarse Aggregate for Portland Cement Concrete," or any equivalent successor standards. Aggregate size shall be of Grade 8 or larger as listed in Section 9-03.1 (3) C, "Grading"; or
- 3. Be screened, washed pea gravel free of deleterious substances in a manner consistent with ASTM Standard C-33 with 100 percent passing a 1/2-inch sieve and less than 5 percent passing a No. 16 sieve. Sieve characteristics shall conform to those acceptable under ASTM Standard C-33.

EXCEPTION: Aggregate shall not be required if a substitute material or system, with sufficient load bearing characteristics, and having approved capability to provide equal or superior air flow, is installed.

1203.6.3.2.4 Soil-gas retarder membrane. A soil-gas retarder membrane, consisting of at least one layer of virgin polyethylene with a thickness of at least 6 mil, or equivalent flexible sheet material, shall be either placed directly under all concrete slabs

so that the slab is in direct contact with the membrane, or on top of the aggregate with 2 inches minimum of fine sand or pea gravel installed between the concrete slab and membrane. The flexible sheet shall extend to the foundation wall or to the outside edge of the monolithic slab. Seams shall overlap at least 12 inches. The membrane shall also be fitted tightly to all pipes, wires, and other penetrations of the membrane and sealed with an approved sealant or tape. All punctures or tears shall be repaired with the same or approved material and similarly lapped and sealed.

1203.6.3.2.5 Sealing of penetrations and joints. All penetrations and joints in concrete slabs or other floor systems and walls below grade shall be sealed by an approved sealant to create an air barrier to limit the movement of soil-gas into the indoor air.

Sealants shall be approved by the manufacturer for the intended purpose. Sealant joints shall conform to manufacturer's specifications. The sealant shall be placed and tooled in accordance with manufacturer's specifications. There shall be no gaps or voids after the sealant has cured.

1203.6.3.2.6 Radon vent. One continuous sealed pipe shall run from a point within the aggregate under each concrete slab to a point outside the building. Joints and connections shall be permanently gas tight. The continuous sealed pipe shall interface with the aggregate in the following manner, or by other approved equal method. The pipe shall be permanently connected to a "T" within the aggregate area so that the two end openings of the "T" lie within the aggregate area. A minimum of 5 feet of perforated drain pipe of 3 inches minimum diameter shall join to and extend from the "T." The perforated pipe shall remain in the aggregate area and shall not be capped at the ends. The "T" and its perforated pipe extensions shall be located at least 5 feet horizontally from the exterior perimeter of the aggregate area.

The continuous sealed pipe shall terminate no less than 12 inches above the eave, and more than 10 horizontal feet from a woodstove or fireplace chimney, or operable window. The continuous sealed pipe shall be labeled "radon vent." The label shall be placed so as to remain visible to an occupant.

The minimum pipe diameter shall be 3 inches unless otherwise approved. Acceptable sealed plastic pipe shall be smooth walled, and may include either PVC schedule 40 or ABS schedule of equivalent wall thickness.

The entire sealed pipe system shall be sloped to drain to the subslab aggregate.

The sealed pipe system may pass through an unconditioned attic before exiting the building; but to the extent practicable, the sealed pipe shall be located inside the thermal envelope of the building in order to enhance passive stack venting.

EXCEPTION:

- A fan for subslab depressurization system includes the following:
- 1. Soil-gas retarder membrane as specified in Section 1203.6.3.2.4;
- 2. Sealing of penetrations and joints as specified in Section 1203.6.3.2.5;
- 3. A 3-inch continuous sealed radon pipe shall run from a point within the aggregate under each concrete slab to a point outside the building;
- 4. Joints and connections shall be gas tight, and may be of either PVC schedule 40 or ABS schedule of equivalent in wall thickness;

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5. A label of "radon vent" shall be placed on the pipe so as to remain visible to an occupant; 6. Fan circuit and wiring as specified in Section 1203.6.3.2.7 and a fan.

If the subslab depressurization system is exhausted through the concrete foundation wall or rim joist, the exhaust terminus shall be a minimum of 6 feet from operable windows or outdoor air intake vents and shall be directed away from operable windows and outdoor air intake vents to prevent radon reentrainment.

1203.6.3.2.7 Fan circuit and wiring and location. An area for location of an in-line fan shall be provided. The location shall be as close as practicable to the radon vent pipe's point of exit from the building, or shall be outside the building shell; and shall be located so that the fan and all downstream piping is isolated from the indoor air.

Provisions shall be made to allow future activation of an inline fan on the radon vent pipe without the need to place new wiring. A 110 volt power supply shall be provided at a junction box near the fan location.

1203.6.3.2.8 Separate aggregate areas. If the 4-inch aggregate area underneath the concrete slab is not continuous, but is separated into distinct isolated aggregate areas by a footing or other barrier, a minimum of one radon vent pipe shall be installed into each separate aggregate area.

EXCEPTION:

Separate aggregate areas may be considered a single area if a minimum 3-inch diameter connection joining the separate areas is provided for every 30 feet of barrier separating those areas.

1203.6.3.2.9 Concrete block walls. Concrete block walls connected to below grade areas shall be considered unsealed surfaces. All openings in concrete block walls that will not remain accessible upon completion of the building shall be sealed at both vertical and horizontal surfaces, in order to create a continuous air barrier to limit the transport of soil-gas into the indoor air.

AMENDATORY SECTION (Amending WSR 05-01-014, filed 12/2/04, effective 7/1/05)

WAC 51-50-1208 Section 1208--Interior space dimensions.

1208.2 Minimum ceiling heights. Occupiable spaces and habitable spaces shall have a ceiling height of not less than 7 feet 6 inches (2286 mm). Bathrooms, toilet rooms, kitchen, storage rooms and laundry rooms shall be permitted to have a ceiling height of not less than 7 feet (2134 mm).

EXCEPTIONS:

^{1.} In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center and projecting not more than 6 inches (152 mm) below the required ceiling height.

^{2.} If any room in a building has a sloped ceiling, the prescribed ceiling height for the room is required in one-half the area thereof. Any portion of the room measuring less than 5 feet (1524 mm) from the finished floor to the ceiling shall not be included in any computation of the minimum area thereof.

^{3.} Mezzanines constructed in accordance with Section 505.1.

^{((4.} Residential Group R Occupancies shall be permitted to have a ceiling height of not less than 7 feet (2134 mm).))

1208.3 Room area. Every dwelling unit shall have at least one room that shall have not less than 120 square feet (13.9 m^2) of net floor area. Other habitable rooms shall have a net floor area of not less than 70 square feet (6.5 m^2).

EXCEPTION: $((\frac{\text{Every}}{})) \underline{K} \text{ itchen } \underline{S} \text{ in } ((\frac{1}{8})) \text{ one- and two-family dwelling } \underline{S} ((\frac{1}{8}) \text{ square } \frac{1}{8}) \text{ one- and two-family dwelling } \underline{S} ((\frac{1}{8}) \text{$

Portions of a room with a sloped ceiling measuring less than 5 feet (1524 mm) or a flat ceiling measuring less than 7 feet (2134 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum habitable area for that room.

AMENDATORY SECTION (Amending WSR 08-01-110, filed 12/18/07, effective 4/1/08)

WAC 51-50-1403 Section 1403--Performance requirements.

1403.2 Weather protection. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section ((1405.3)) 1405.4. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistant barrier behind the exterior veneer, as described in Section 1404.2, and a means of draining water that enters the assembly to the exterior. An air space cavity is not required under the exterior cladding for an exterior wall clad with lapped or panel siding made of plywood, engineered wood, hardboard, or fiber cement. Protection against condensation in the exterior wall assembly shall be provided in accordance with Section 1405.3.

EXCEPTIONS:

- 1. A weather-resistant exterior wall envelope shall not be required over concrete or masonry walls designed in accordance with Chapters 19 and 21, respectively.
- 2. Compliance with the requirements for a means of drainage, and the requirements of Sections 1404.2 and 1405.3, shall not be required for an exterior wall envelope that has been demonstrated through testing to resist wind-driven rain, including joints, penetrations and intersections with dissimilar materials, in accordance with ASTM E 331 under the following conditions:
- 2.1 Exterior wall envelope test assemblies shall include at least one opening, one control joint, one wall/eave interface and one wall sill. All tested openings and penetrations shall be representative of the intended end-use configuration.
- 2.2 Exterior wall envelope test assemblies shall be at least 4 feet by 8 feet (1219 mm by 2438 mm) in size.
- 2.3 Exterior wall envelope assemblies shall be tested at a minimum differential pressure of 6.24 pounds per square foot (psf) (0.297 kN/m^2) .
- 2.4 Exterior wall envelope assemblies shall be subjected to a minimum test exposure duration of 2 hours.
- The exterior wall envelope design shall be considered to resist wind-driven rain where the results of testing indicate that water did not penetrate control joints in the exterior wall envelope, joints at the perimeter of openings or intersections of terminations with dissimilar materials.
- 3. Exterior insulation and finish systems (EIFS) complying with Section 1408.4.1.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1405 Section 1405--Installation of wall coverings.

(($\frac{1405.5.2}{1}$)) $\frac{1405.6.2}{1}$ Seismic requirements. Anchored masonry veneer located in Seismic Design Category C, D, E, or F shall conform to the requirements of Section 6.2.2.10, except Section 6.2.2.10.3.2, of TMS 402/ACI 530/ASCE 5(($\frac{1}{1}$ TMS 402)).

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1602 ((Section 1602--Definitions and notations.))
Reserved.

((BALCONY, EXTERIOR. This definition is not adopted.

peck. This definition is not adopted.))

<u>AMENDATORY SECTION</u> (Amending WSR 08-01-110, filed 12/18/07, effective 4/1/08)

WAC 51-50-1607 ((Section 1607--Live loads.)) Reserved.

((IBC Table 1607.1 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS AND MINIMUM CONCENTRATED LIVE LOADS

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (psf)
4. Assembly areas and theaters		
Fixed seats (fastened to floor)	60	
Follow spot, projections, and control rooms	50	
Lobbies	100	
Movable seats	100	
Stages and platforms	125	
Other assembly areas	100	
5. (Reserved)		
9. Decks ^h and Balconics	Same as occupancy served	*********
28. Residential One- and two-family dwellings		

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (psf)
Uninhabitable attics without storage	10	
Uninhabitable attics with limited storage	20	
Habitable attics and sleeping areas	30	********
All other areas	40	
Hotels and multifamily dwellings		
Private rooms and corridors serving them	40	
Public rooms and corridors serving them	100))	

NEW SECTION

WAC 51-50-1609 Section 1609--Wind loads.

1609.1.1 Determination of wind loads. Wind loads on every building or structure shall be determined in accordance with Chapter 6 of ASCE 7 or provisions of the alternate all-heights method in Section 1609.6. The type of opening protection required, the basic wind speed and the exposure category for a site is permitted to be determined in accordance with Section 1609 or ASCE 7. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered.

EXCEPTIONS:

- $1. \, Subject to \, the \, limitations \, of \, Section \, 1609.1.1.1, \, the \, provisions \, of \, ICC \, 600 \, shall \, be \, permitted \, for \, applicable \, Group \, R-2 \, and \, R-3 \, buildings.$
- 2. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of the AF&PA WFCM.
- 3. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of AISI S230.
- 4. Designs using NAAMM FP 1001.
- 5. Designs using TIA-222 for antenna-supporting structures and antennas. In section 2.6.6.2, the extent of Topographic Category 2, escarpments, shall extend 16 times the height of the escarpment.
- 6. Wind tunnel test in accordance with Section 6.6 of ASCE 7, subject to the limitations in Section 1609.1.1.2.

AMENDATORY SECTION (Amending WSR 08-01-110, filed 12/18/07, effective 4/1/08)

WAC 51-50-1613 ((Section 1613--Earthquake loads.)) Reserved.

((1613.7 Modification of ASCE 7. ASCE 7-05 including Supplement #1 is modified according to this section.

1613.7.1 The following equations found in Section 12.8 and Section 15.4 expressing limitations for the seismic response coefficient C_s shall be defined as follows:

Equation 12.8-5 $C_s = 0.044S_{ps}I \ge 0.01$ Equation 15.4-1 $C_s = 0.044S_{ps}I \ge 0.03$ Equation 15.4-3 $C_s = 0.044S_{ps}I \ge 0.01$))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-1714 Section ($(\frac{1714}{})$) $\frac{1715}{}$ --Preconstruction load tests.

((1714.5 Exterior window and door assemblies. The design pressure rating of exterior windows and doors in buildings shall be determined in accordance with Section 1714.5.1 or 1714.5.2.

EXCEPTION:

1. Structural wind load design pressures for window units smaller than the size tested in accordance with Section 1714.5.1 or 1714.5.2 shall be permitted to be higher than the design value of the tested unit provided such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as the tested unit. Where such calculated design pressures are used, they shall be validated by an additional test of the window unit having the highest allowable design pressure.

2. Custom exterior windows and doors manufactured by a small business shall be exempt from all testing requirements in Section 1714 of the International Building Code provided they meet the applicable provisions of Chapter 24 of the International Building Code.))

1715.5 Exterior window and door assemblies. The design pressure rating of exterior windows and doors in buildings shall be determined in accordance with Section 1715.5.1 or 1715.5.2.

EXCEPTIONS:

1. Structural wind load design pressures for window units smaller than the size tested in accordance with Section 1715.5.1 or 1715.5.2 shall be permitted to be higher than the design value of the tested unit provided such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as the tested unit. Where such calculated design pressures are used, they shall be validated by an additional test of the window unit having the highest allowable design pressure.

2. Custom exterior windows and doors manufactured by a small business shall be exempt from all testing requirements in Section 1715 of the International Building Code provided they meet the applicable provisions of Chapter 24 of the International Building Code.

NEW SECTION

WAC 51-50-2104 Section 2104--Construction.

2104.1 Masonry construction. Masonry construction shall comply with the requirements of Sections 2104.1.1 through 2104.6 and with TMS 602/ACI 530.1/ASCE 6 except as modified by Sections 2104.5 and 2104.6.

- 2104.5 TMS 602/ACI 530.1/ASCE 6, Article 3.5 D, grout lift heights. Modify items 1.b, 1.c, and 2.b of Article 3.5 D as follows:
- 3.5 D.1.b When the conditions of Articles 3.5 D.1.a.i and 3.5 D.1.a.ii are met but there are intermediate bond beams within the grout pour, limit the grout lift height to the bottom of the lowest bond beam that is more than 5.33 ft. (1.63 m) above the bottom of the lift, but do not exceed a grout lift height of 12.67 ft. (3.86 m).
- 3.5 D.1.c When the conditions of Article 3.5 D.1.a.i or Article 3.5 D.1.a.ii are not met, place grout in lifts not exceeding 5.33 ft. (1.63 m).
- 3.5 D.2.b When placed in masonry that has not cured for at least 4 hours, place in lifts not exceeding 5.33 ft. (1.63 m).
- 2104.6 TMS 602/ACI 530.1/ASCE 6, Article 3.2F, cleanouts. Modify the first sentence of Article 3.2F as follows:

Provide cleanouts in the bottom course of masonry for each grout pour when the grout pour height exceeds 5.33 ft. (1.63 m).

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-2106 ((Section 2106--Seismic design.)) Reserved.

((2106.1.1 Basic seismic-force-resisting system. Buildings relying on masonry shear walls as part of the basic seismic-force-resisting system shall comply with Section 1.14.2.2 of ACI 530/ASCE 5/TMS 402 or with Section 2106.1.1.1, 2106.1.1.2, or 2106.1.1.3.

EXCEPTION:

Special reinforced masonry shear walls are not required to comply with Section 1.14.2.2.5(a) of ACI 530/ASCE 5/TMS 420 (MSJC-05), provided the masonry resists the calculated shear without shear reinforcement.))

NEW SECTION

WAC 51-50-21070 Section 2107--Allowable stress design.

- **2107.1 General.** The design of masonry structures using allowable stress design shall comply with Sections 2106, 2107.2 and the requirements of Chapters 1 and 2 of TMS 402/ACI 530/ASCE 5 except as modified by Sections 2107.3 through 2107.5.
- 2107.2 Load combinations. Structures and portions thereof shall be designed to resist the most critical effects resulting from the load combinations of Section 1605.3. When using the alternative load combinations of Section 1605.3.2 that include wind or seismic loads, allowable stresses are permitted to be increased by one-

third.

2107.6 TMS 402/ACI 530/ASCE 5, Section 1.16.1 anchor bolts. Modify the second paragraph of Section 1.16.1 as follows: Anchor bolts placed in the top of grouted cells and bond beams shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the bolts and the masonry unit or 1/2 inch (12.7 mm) of coarse grout between the bolts and the masonry unit. Anchor bolts placed in drilled holes in the face shells of hollow masonry units shall be permitted to contact the masonry unit where the bolt passes through the face shell, but the portion of the bolt that is within the grouted cell shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the head or bent leg of the bolt and the masonry unit or 1/2 inch (12.7 mm) of coarse grout between the head or bent leg of the bolt and the masonry unit.

AMENDATORY SECTION (Amending WSR 05-01-014, filed 12/2/04, effective 7/1/05)

WAC 51-50-2108 Section 2108--Strength design of masonry.

((2108.2)) 2108.4 TMS 402/ACI 530/ASCE 5((/TMS 402)), Section 3.1.6. Modify Section 3.1.6 as follows:

- **3.1.6 Headed and bent-bar anchor bolts.** All embedded bolts shall be grouted in place, except that 1/4 inch (6.4 mm) diameter bolts are permitted to be placed in bed joints that are at least 1/2 inch (12.7 mm) in thickness.
- 2108.5 TMS 402/ACT 530/ASCE 5, Section 1.16.1 anchor bolts. Modify the second paragraph of Section 1.16.1 as follows: Anchor bolts placed in the top of grouted cells and bond beams shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the bolts and the masonry unit or 1/2 inch (12.7 mm) of coarse grout between the bolts and the masonry unit. Anchor bolts placed in drilled holes in the face shells of hollow masonry units shall be permitted to contact the masonry unit where the bolt passes through the face shell, but the portion of the bolt that is within the grouted cell shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the head or bent leg of the bolt and the masonry unit.

NEW SECTION

WAC 51-50-2111 Section 2111--Masonry fireplaces.

- **2111.7 Fireplaces.** Fireplaces shall be provided with each of the following:
- 1. Tightly fitting flue dampers, operated by a readily accessible manual or approved automatic control.

EXCEPTION:

Fireplaces with gas logs shall be installed in accordance with the International Mechanical Code Section 901, except that the standards for liquefied petroleum gas installations shall be NFPA 58 (Liquefied Petroleum Gas Code) and NFPA 54 (National Fuel Gas Code).

2. An outside source for combustion air ducted into the firebox. The duct shall be at least 6 square inches, and shall be provided with an operable outside air duct damper.

EXCEPTION:

Washington certified fireplaces shall be installed with the combustion air systems necessary for their safe and efficient combustion and specified by the manufacturer in accordance with the Washington State Building Standard 31-2 (WAC 51-50-31200) and IBC Section 2114 (WAC 51-50-2114).

- 3. Site built fireplaces shall have tight fitting glass or metal doors, or a flue draft induction fan or as approved for minimizing back-drafting. Factory built fireplaces shall use doors listed for the installed appliance.
- 2111.7.1 Lintel and throat. Masonry over a fireplace opening shall be supported by a lintel of noncombustible material. The minimum required bearing length on each end of the fireplace opening shall be 4 inches (102 mm). The fireplace throat or damper shall be located a minimum of 8 inches (203 mm) above the top of the fireplace opening.

NEW SECTION

WAC 51-50-2400 Chapter 24--Glass and glazing.

Section 2405--Sloped glazing and skylights.

- **2405.3 Screening.** Where used in monolithic glazing systems, heat-strengthened glass and fully tempered glass shall have screens installed below the glazing material. The screens and their fastenings shall:
 - (1) Be capable of supporting twice the weight of the glazing;
- (2) Be firmly and substantially fastened to the framing members; and
- (3) Be installed within 4 inches (102 mm) of the glass. The screens shall be constructed of a noncombustible material not thinner than No. 12 B&S gage (0.0808 inch) with mesh not larger than 1 inch by 1 inch (25 mm by 25 mm). In a corrosive atmosphere, structurally equivalent noncorrosive screen materials shall be used. Heat strengthened glass, fully tempered glass and wired glass, when used in multiple-layer glazing systems as the bottom glass layer over the walking surface, shall be equipped with

screening that conforms to the requirements for monolithic glazing systems.

EXCEPTIONS:

In monolithic and multiple-layer sloped glazing systems, the following applies:

- 1. Fully tempered glass installed without protective screens where glazed between intervening floors at a slope of 30 degrees (0.52 rad) or less from the vertical plane shall have the highest point of the glass 10 feet (3048 mm) or less above the walking surface.
- 2. Screens are not required below any glazing material, including annealed glass, where the walking surface below the glazing material is permanently protected from the risk of falling glass or the area below the glazing material is not a walking surface.
- 3. Any glazing material, including annealed glass, is permitted to be installed without screens in the sloped glazing systems of commercial or detached noncombustible greenhouses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 30 feet (9144 mm) above grade.
- 4. Screens shall not be required within individual dwelling units in Groups R-2, R-3 and R-4 where fully tempered glass is used as single glazing or as both panes in an insulating glass unit, and the following conditions are met:
- 4.1. Each pane of the glass is 16 square feet (1.5 m²) or less in area.
- 4.2. The highest point of the glass is 12 feet (3658 mm) or less above any walking surface or other accessible area.
- 4.3. The glass thickness is 3/16 inch (4.8 mm) or less.
- 5. Screens shall not be required for laminated glass with a 15 mil (0.38 mm) polyvinyl butyral (or equivalent) interlayer within the following limits:
- 5.1. Each pane of glass is 16 square feet (1.5 m²) or less in area.
- 5.2. The highest point of the glass is 12 feet (3658 mm) or less above a walking surface or other accessible area.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-2900 Chapter 29--((Plumbing systems)) Minimum plumbing fixtures and sanitation facilities.

SECTION 2901--((PLUMBING CODE)) GENERAL.

((Plumbing systems shall comply with the Plumbing Code.))
2901.1 Scope. The provisions of this chapter shall apply to the number of plumbing fixtures and sanitation facilities to be provided in an occupancy regulated by this Code.

2901.2 Minimum requirements. Plumbing fixtures and sanitation facilities shall be provided in the minimum number shown in Table 2902.1 and in this chapter. Where the proposed occupancy is not listed in Table 2902.1, the building official shall determine the fixture and facility requirements based on the occupancy which most nearly resembles the proposed occupancy. The number of occupants used for determining minimum fixtures and facilities shall be computed at the rate of one occupant per unit of net floor area as prescribed in Table 2902.1.

Plumbing fixtures need not be provided for unoccupied buildings or facilities.

SECTION 2902--((GENERAL)) FIXTURES .

2902.1 Number of fixtures.

((2902.1.1 Requirements. Plumbing fixtures shall be provided in the minimum number shown in Table 2902.1 and in this chapter. Where the proposed occupancy is not listed in Table 2902.1, the

- building official shall determine fixture requirements based on the occupancy which most nearly resembles the intended occupancy.
- Plumbing fixtures need not be provided for unoccupied buildings or facilities.
- 2902.1.2)) 2902.1.1 Private offices. Fixtures only accessible to private offices shall not be counted to determine compliance with this section.
- $((\frac{2902.1.3}{2}))$ $\underline{2902.1.2}$ Occupancy load distribution. The occupant load shall be divided equally between the sexes, unless data approved by the building official indicates a different distribution of the sexes.
- ((2902.1.4)) 2902.1.3 Food preparation areas. In food preparation, serving and related storage areas, additional fixture requirements may be dictated by health codes.
- ((2902.1.5)) <u>2902.1.4</u> Other requirements. For other requirements for plumbing facilities, see Section 1210 and Chapter 11.
- 2902.2 Access to fixtures.
- **2902.2.1 Location.** Plumbing fixtures shall be located in each building or conveniently in a building adjacent thereto on the same property.
- **2902.2.1.1 Toilet rooms.** Toilet rooms shall not open directly into a room used for the preparation of food for service to the public or residents of Group R-2 boarding homes and residential treatment facilities licensed by Washington state.
- **2902.2.2 Multiple tenants.** Access to toilets serving multiple tenants shall be through a common use area and not through an area controlled by a tenant.
- **2902.2.3 Multistory buildings.** Required fixtures shall not be located more than one vertical story above or below the area served.

SECTION 2903--FACILITIES.

- ((2902.3 Separate)) 2903.3 Facilities.
- ((2902.3.1)) <u>2903.3.1</u> Requirements. Separate toilet facilities shall be provided for each sex.
- EXCEPTION: In occupancies serving 15 or fewer persons, one toilet facility designed for use by no more than one person at a time shall be permitted for use by both sexes.
- ((2902.4)) 2903.4 Pay facilities. Required facilities shall be free of charge. Where pay facilities are installed, they shall be in addition to the minimum required facilities.

- ((2902.5)) 2903.5 is not adopted.
- ((2902.6 is not adopted.))

SECTION ((2903)) 2904--SPECIAL PROVISIONS.

- ((2903.1)) <u>2904.1</u> **Dwelling units**. Dwelling units shall be provided with a kitchen sink.
- ((2903.2)) 2904.2 Water closet space requirements. The water closet stool in all occupancies shall be located in a clear space not less than 30 inches (762 mm) in width, with a clear space in front of the stool of not less than 24 inches (610 mm).
- ((2903.3)) <u>2904.3</u> Water. Each required sink, lavatory, bathtub and shower stall shall be equipped with hot and cold running water necessary for its normal operation.
- ((2903.4)) 2904.4 Drinking fountains.
- ((2903.4.1)) <u>2904.4.1</u> Number. Occupant loads over 30 shall have one drinking fountain for the first 150 occupants, then one per each additional 500 occupants.

EXCEPTIONS:

- 1. Sporting facilities with concessions serving drinks shall have one drinking fountain for each 1000 occupants.
 2. A drinking fountain need not be provided in a drinking or dining establishment.
- ((2903.4.2)) 2904.4.2 Multistory buildings. Drinking fountains shall be provided on each floor having more than 30 occupants in schools, dormitories, auditoriums, theaters, offices and public buildings.
- ((2903.4.3)) 2904.4.3 Penal institutions. Penal institutions shall have one drinking fountain on each cell block floor and one on each exercise floor.
- ((2903.4.4)) 2904.4.4 Location. Drinking fountains shall not be located in toilet rooms.

TABLE 2902.1--MINIMUM PLUMBING FIXTURES^{1,2,4,6}

TYPE OF BUILDING OR	(fixtures p	closets per person)	(fixtures j	rories ⁵ per person)	BATHTUB OR SHOWER
For the occupancies listed below, use 30 square feet (2.79 m²) per occupant for the minimum number of plumbing fixtures.					\ I I /
Group A Assembly places					
Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages and similar uses including restaurants classified as Group B Occupancies	1:1-25 2:26-75 3:76-125 4:126-200 5:201-300 6:301-400 Over 400, ac for each add males or 150		One per 2 w	ater closets	

	WATER	CLOSETS	LAVAT	TORIES ⁵	
TYPE OF BUILDING OR	(fixtures per person)		(fixtures per person)		BATHTUB OR SHOWER
OCCUPANCY ⁸	MALE ³	FEMALE	MALE	FEMALE	(fixtures per person)
For the assembly occupancie	ncies listed below, use the number of fixed seating or, where no fixed seating is				
provided, use 15 square feet (1.39 m²) per occupant for the minimum number of plumbing fixtures.					
Assembly places9	1:1-100	One per 25	1:1-200	1:1-200	
Theaters, auditoriums,	• • • • • • • • • • • • • • • • • • • •		• • • • • • • •	• • • • • • • •	
convention halls, dance floors, lodge rooms,	2:101-200	Up to 400	2:201-400	2:201-400	
casinos, and such places	3:201-400		3:401-750	3:401-750	
which have limited time	3.201 100		3.101 730	3.101 730	
for fixture use	Over 400, ad			dd one fixture	
(intermissions)	for each additional 250		for each additional 500		
	males or 50 f		persons	1.1.200	
Assembly places Stadiums, arena and other	1:1-100	One per 50	1:1-200	1:1-200	
sporting facilities where	2:101-200	Up to 400	2:201-400	2:201-400	
fixture use is not limited	3:201-400		3:401-750	3:401-750	
to intermissions	Over 400, add one fixture		Over 750, add one fixture		
	for each addi males or 100			itional 500	
For the assembly occupancion			persons	ating or where	no fixed seating is
provided, use 30 square feet					
Worship places	· / I	•		•	
Principal assembly area	One per	One per 75	One per 2 w	ater closets	
	150	•	-		
Educational & activity	One per	One per 75	One per 2 w	ater closets	
unit 125					
plumbing fixtures.	elow, use 200	square reet (10	5.56 III) pei 00	cupant for the	minimum number of
Group B	1:1-15	1:1-15	One per 2 w	ater closets	
and other clerical or	2:16-35	2:16-35	•		
administrative employee	3:36-55	3:36-55			
accessory use	Over 55, add	one for			
	each addition	1 = 0			
	persons				
For the occupancies listed below, use 100 square feet (9.3 m²) per student for the minimum number of plumbing fixtures.					
Group E	1:1-15	1:1-15	One per 2 w	ater closets	
Schools - for staff use	2:16-35	2:16-35	· r · ,,		
All schools	3:36-55	3:36-55			
(One staff per 20	Over 55, add	one fixture			
students)	for each additional 40				
Cohoola for at 1	persons	1.1.20	1.1.20	1.1.20	
Schools - for student use	1:1-20	1:1-20	1:1-20	1:1-20	
Day care	2:21-50	2:21-50	2:21-50	2:21-50	
	Over 50, add one fixture for each additional 50		Over 50, add one fixture for each additional 50		
	persons				
Elementary	One per 30	One per 25	persons One per 2 w	ater closets	
Secondary	One per 40	One per 30	One per 2 w		

TYPE OF BUILDING OR		CLOSETS per person)	LAVATORIES ⁵ (fixtures per person)	DATHTUD OF CHOUSE
OCCUPANCY ⁸	TIE OF BOILDING OR		MALE FEMALE	(fixtures per person)
For the occupancies listed bolumbing fixtures.	elow, use 50 s	quare feet (4.6	5 m ²) per occupant for the m	• • • •
Education facilities other than Group E				
Others (colleges, universities, adult centers, etc.)	One per 40	One per 25	One per 2 water closets	
For the occupancies listed b plumbing fixtures.	elow, use 2,00	00 square feet (185.8 m ²) per occupant for t	he minimum number of
Group F and Group H	1:1-10	1:1-10	One per 2 water closets	
Workshop, foundries and similar establishments, and hazardous occupancies	2:11-25	2:11-25		One shower for each 15 persons exposed to excessive heat or to skin
	3:26-50	3:26-50		contamination with irritating materials
	4:51-75	4:51-75		
	5:76-100	5:76-100		
	Over 100, add one fixture for each additional 30 persons			
For the occupancies listed be the general use area for the			lication and 200 square feet	(18.58 m ²) per occupant of
Group I ⁷	ininining in indir	or pramon		
Hospital waiting rooms	One per roor either sex)	n (usable by	One per room	
Hospital general use areas	1:1-15	1:1-15	One per 2 water closets	
	2:16-35	3:16-35		
	3:36-55	3:36-55		
	Over 55, add for each add persons			
Hospital patient rooms:	1			
Single Bed	One adjacent to and directly accessible from		One per toilet room	One per toilet room
Isolation	One adjacent to and directly accessible from		One per toilet room	One per toilet room
Multibed	One per 4 patients		One per 4 patients	One per 8 patients
Long-term	One per 4 pa	tients	One per 4 patients	One per 15 patients
fails and reformatories				
Cell	One per cell		One per cell	
Exercise room	One per exer		One per exercise room	0 0
Other institutions (on each occupied floor)	One per 25	One per 25	One per 2 water closets	One per 8
For the occupancies listed b	elow, use 200	square feet (18	3.58 m ²) per occupant for the	e minimum number of

	WATER CLOSETS (fixtures per person)		LAVATORIES ⁵ (fixtures per person)			
TYPE OF BUILDING OR OCCUPANCY ⁸	MALE ³	FEMALE	MALE	FEMALE	BATHTUB OR SHOWER (fixtures per person)	
Retail or wholesale stores	1:1-50	1:1-50	One per 2 wa		(HARRIES POI POISOII)	
	2:51-100	2:51-100				
	3:101-400	3:101-200				
		4:201-300				
		5:301-400				
	Over 400, ac for each add males or 150					
	For Group R Occupancies containing dwelling units or guest rooms, use the table below. For dormitories, use 200 square feet (18.58 m²) per occupant for the minimum number of plumbing fixtures.					
Group R						
Dwelling units	One per dwe	lling unit	One per dwe	lling unit	One per dwelling unit	
Hotel, motel, and boarding house guest rooms	One per guest room		One per guest room		One per guest room	
Boarding homes licensed by the department of social and health services	One per 8	One per 8	One per 8	One per 8	One per 12	
Dormitories	One per 10	One per 8	One per 12	One per 12	One per 8	
	Over 10, add one fixture for each additional 25 males and over 8, add one for each additional 20 females		Over 12, add for each add males and or additional 15	itional 20 ne for each	For females, add one additional unit per each additional 30. Over 150 persons, add one additional unit per each additional 20 persons	
For the occupancies listed below, use 5,000 square feet (464.5 m²) per occupant for the minimum number of plumbing fixtures.						
Group S	1:1-10	1:1-10	One per 40 c each sex	occupants of	One shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or	
Warehouses	2:11-25	2:11-25			irritating materials	
	3:26-50	3:26-50				
	4:51-75	4:51-75				
	5:76-100	5:76-100				
	Over 100, ac each 30 pers					

¹The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.

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²For occupancies not shown, see Section ((2902.1.1)) <u>2901.2</u>.

³Where urinals are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one quarter (25%) of the minimum specified. For men's facilities serving 26 or more persons, not less than one urinal shall be provided.

⁴For drinking fountains, see Section ((2903.4)) <u>2904.4</u>.

⁵Twenty-four inches (610 mm) of wash sink or 18 inches (457 mm) of a circular basin, when provided with water outlets for such space,

shall be considered equivalent to one lavatory.

⁶For when a facility may be usable by either sex, see Section ((2902.3.1)) <u>2903.3.1</u>.

⁷See WAC 246-320 for definitions, other fixtures and equipment for hospitals.

⁸When a space is accessory to or included as a part of a different occupancy group per Chapter 3, the area per occupant for the minimum plumbing fixture number is to be determined by its own specific use or purpose, not by that of the building's occupancy group.

In multiplex movie theaters, where shows are scheduled at different times, the number of occupants for toilet fixture use may be based upon one-half (50%) of the total in all the auditoriums, but no less than the number in the largest auditorium.

<u>AMENDATORY SECTION</u> (Amending WSR 08-01-110, filed 12/18/07, effective 4/1/08)

WAC 51-50-3001 ((Section 3001--General.)) Reserved.

((3001.1 Scope. This chapter governs the design, construction, installation, alteration and repair of elevators and conveying systems and their components.

3001.2 Referenced standards. Except as otherwise provided for in this code, the design, construction, installation, alteration, repair and maintenance of elevators and conveying systems and their components shall conform to ASME A17.1, ASME A90.1, ASME B20.1, ALI ALCTV, and ASCE 24 for construction in flood hazard areas established in Section 1612.3.

3001.3 Accessibility. Passenger elevators required to be accessible by Chapter 11 shall conform to ICC A117.1.

3001.4 Change in use. A change in use of an elevator from freight to passenger, passenger to freight, or from one freight class to another freight class shall comply with Part XII of ASME A17.1.))

Section 3002--Hoistway enclosures.

3002.4 Elevator car to accommodate ambulance stretcher. In buildings four stories in height or more, and in buildings which are required to have an elevator and contain Group R-1, R-2 or I Occupancies on a level other than the exit discharge level, at least one elevator shall be provided for fire department emergency access to all floors. Such elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 2134 mm) ambulance stretcher with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.

NEW SECTION

WAC 51-50-3108 Section 3108--Telecommunications and broadcast towers.

3108.1 General. Towers shall be designed and constructed in accordance with the provisions of TIA-222. In Section 2.6.6.2, the

extent of Topographic Category 2, escarpments, shall extend 16 times the height of the escarpment. Towers shall be designed for seismic loads. The exceptions to the requirement of seismic design listed in Section 2.7.3 shall not apply. Class I structures per Table 2-1 of the standard may be exempted from seismic design, if approved by the building official.

EXCEPTION:

Single free-standing poles used to support antennas not greater than 75 feet (22,860 mm), measured from the top of the pole to grade, shall not be required to be noncombustible.

NEW SECTION

WAC 51-50-3401 Section 3401--General.

3401.5 Alternative compliance. Work performed in accordance with the 2009 International Existing Building Code as amended in WAC 51-50-480000 shall be deemed to comply with the provisions of this chapter.

NEW SECTION

WAC 51-50-3404 Section 3404--Alterations.

3404.1 General. Except as provided by Section 3401.4 or this section, alterations to any building or structure shall comply with the requirements of the Code for new construction. Alterations shall be such that the existing building or structure is no less conforming with the provisions of this Code than the existing building or structure was prior to the alteration.

EXCEPTIONS:

- 1. An existing stairway shall not be required to comply with the requirements of Section 1009 where the existing space and construction does not allow a reduction in pitch or slope.
- 2. Handrails otherwise required to comply with Section 1009.12 shall not be required to comply with the requirements of Section 1012.6 regarding full extension of the handrails where such extensions would be hazardous due to plan configuration.
- 3. In buildings considered existing structures on July 1, 2010, dwelling units shall be permitted to have a ceiling height of not less than 7 feet (2134 mm).

AMENDATORY SECTION (Amending WSR 04-01-108, filed 12/17/03, effective 7/1/04)

WAC 51-50-3408 Section ((3408)) 3410--Moved structures.

((3408.1)) 3410.1 Conformance. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code, the International Residential Code (chapter 51-51 WAC), the International Mechanical Code (chapter 51-52 WAC), the International Fire Code (chapter 51-54 WAC), the Uniform Plumbing Code and Standards (chapters 51-56 and 51-57 WAC), the Washington State Energy Code (chapter 51-11 WAC) and the Washington State Ventilation and Indoor Air Quality Code (chapter 51-13 WAC) for new buildings or structures.

EXCEPTION:

Group R-3 buildings or structures are not required to comply if:

- 1. The original occupancy classification is not changed; and
- 2. The original building is not substantially remodeled or rehabilitated.

For the purposes of this section, a building shall be considered to be substantially remodeled when the costs of remodeling exceed 60 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-3409 Section ((3409)) 3411--Accessibility for existing buildings.

((3409.7)) 3411.7 Alterations affecting an area containing a primary function. Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route to the primary function area shall include toilet facilities, telephones or drinking fountains serving the area of primary function.

EXCEPTIONS:

- 1. The costs of providing the accessible route are not required to exceed 20 percent of the costs of the alteration affecting the area of primary function.
- 2. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.
- 3. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
- 4. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of an existing building, facility or element.

((3409.8.9)) 3411.8.11 Toilet rooms. Where it is technically infeasible to alter existing toilet and bathing facilities to be accessible, an accessible ((unisex)) family or assisted use toilet or bathing facility constructed in accordance with Section 1109.2.1 is permitted. The ((unisex)) family or assisted use facility shall be located on the same floor and in the same area as the existing facility. The number of toilet facilities and water closets required by the State Building Code is permitted to be reduced by one, in order to provide accessible features.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480000 ((Appendix Chapter M.)) 2009 International Existing Building Code.

INTERNATIONAL EXISTING BUILDING CODE ((2006)) 2009 EDITION

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480101 Section 101--General.

- 101.4 Applicability. When requested by the permit applicant, this code shall apply to the repair, alteration, change of occupancy and relocation of buildings existing on the date of adoption of this code, regardless of occupancy, subject to the criteria of Sections 101.4.1 and 101.4.2. When compliance with this code has not been requested, compliance with the ((International)) State Building((Fire and Mechanical Codes (as applicable))) Code as adopted in Title 51 WAC shall be demonstrated.
- 101.4.1 Buildings not previously occupied. A building or portion of a building that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall comply with the provisions of the State Building Code adopted in Title 51 WAC, for new construction or with any current permit for such occupancy.
- 101.4.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Fire Code, ((or the International Property Maintenance Code,)) or as deemed necessary by the code official to mitigate an unsafe building. For the purpose of this section, "unsafe building" is not to be construed as mere lack of compliance with the current code.
- ((101.5 Compliance methods. The repair, alteration, change of occupancy, addition or relocation of all existing buildings shall comply with one of the methods listed in Sections 101.5.1 through 101.5.3 as selected by the applicant. Application of a method shall be the sole basis for assessing the compliance of work performed under a single permit unless otherwise approved by the code official. Sections 101.5.1 through 101.5.3 shall not be

applied in combination with each other.

EXCEPTION:

Subject to the approval of the code official, alterations complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code unless the building is undergoing more than a limited structural alteration as defined in Section 807.5.3. New structural members added as part of the alteration shall comply with the International Building Code. Alterations of existing buildings in flood hazard areas shall comply with Section 601.3.))

101.7 Appendices. The code official is authorized to require rehabilitation and retrofit of buildings, structures, or individual structural members in accordance with the appendices of this code if such appendices have been individually adopted. ((\vec{\text{Where}}\)) Appendix A, Guidelines for the Seismic Retrofit of Existing Buildings, is ((\frac{\text{specifically referenced in the text}})) hereby adopted as part of this code((\frac{\text{the comes part of this code}})) without any specific adoption by the local jurisdiction.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480102 Section 102--Applicability.

102.4.1 Fire prevention. The provisions of the International Fire Code shall apply to matters affecting or relating to structures, processes and premises $((\frac{from}))$ regarding: The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; $((\frac{from}))$ conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and $((\frac{from}))$ the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation except as specifically provided for in this \underline{C} ode.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480302 ((Section 302--Additions, alterations or repairs.)) Reserved.

((302.1 Existing buildings or structures. Additions or alterations to any building or structure shall comply with the requirements of the *International Building Code* for new construction except as specifically provided in this code. Additions or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any provisions of the *International Building Code*. An existing building plus additions shall comply with the height and area

provisions of the *International Building Code*. Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480305 ((Section 305--Change of occupancy.)) Reserved.

(([B] 305.1 Conformance. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the *International Building Code* for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of the *International Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use. The hazard tables of Chapter 9 may be used to demonstrate the relative fire and life risk of the existing and the new proposed uses.))

NEW SECTION

WAC 51-50-480307 Section 307--Change of occupancy.

[B] 307.1 Conformance. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the International Building Code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of the International Building Code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use. The hazard tables of Chapter 9 may be used to demonstrate the relative fire and life risk of the existing and the new proposed uses.

WAC 51-50-480506 ((Section 506--Structural.)) Reserved.

- ((506.1.1.2 IBC level seismic forces. When seismic forces are required to meet the *International Building Code* level, they shall be one of the following:
- 1. One hundred percent of the values in the International Building Code. The R-factor used for analysis in accordance with Chapter 16 of the International Building Code shall be the R-factor specified for structural systems classified as "ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system satisfies the proportioning and detailing requirements for systems classified as "intermediate" or "special."
- 2. Those associated with the BSE-1 and BSE-2 Earthquake Hazard Levels defined in ASCE 41. Where ASCE 41 is used, the corresponding performance levels shall be those shown in Table 506 1 1 2

ASCE 41 AND ASCE 31 PERFORMANCE LEVELS				
OCCUPANCY CATEGORY (BASED ON IBC TABLE 1604.5)	PERFORMANCE LEVEL FOR USE WITH ASCE 31 AND WITH ASCE 41 BSE-1 EARTHQUAKE	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-2 EARTHQUAKE		
Ŧ	Life Safety (LS)	Collapse Prevention (CP)		
Ħ	Life Safety (LS)	Collapse Prevention (CP)		
₩	Note a	Note a		
IV	Immediate Occupancy (IO)	Life Safety (LS)		

TABLE 506.1.1.2
ASCE 41 AND ASCE 31 PERFORMANCE LEVELS

a. Performance levels for Occupancy Category III shall be taken as halfway between the performance levels specified for Occupancy Category II and IV. Where seismic forces are permitted to meet reduced International Building Code levels, the performance level for Occupancy Category III shall be Life Safety (LS). Where seismic forces are required to meet the International Building Code levels, performance levels for Occupancy Category III shall be taken as follows: Acceptance criteria shall be taken as twenty-five percent more restrictive than the acceptance criteria specified for Occupancy Category IV performance levels, but need not be more restrictive than the acceptance criteria specified for Occupancy Category IV performance levels.

- 506.1.1.3 Reduced IBC level seismic forces. When seismic forces are permitted to meet reduced *International Building Code* levels, they shall be one of the following:
- 1. Seventy-five percent of the forces prescribed in the International Building Code. The R-factor used for analysis in accordance with Chapter 16 of the International Building Code shall be the R-factor as specified in Section 506.1.1.2 of this code.
- 2. In accordance with the applicable chapters in Appendix A of this code as specified in Items 2.1 through 2.5 below. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A shall be deemed to comply with the requirements for reduced *International Building Code* force levels.

2.1. The seismic evaluation and design of unreinforced masonry

bearing wall buildings in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter Al.

- 2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A2.
- 2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A3.
- 2.4. Seismic evaluation and design of soft, weak or open-front wall conditions in multiunit residential buildings of wood construction in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A4.
- 2.5. Seismic evaluation and design of concrete buildings and concrete with masonry infill buildings in all occupancy categories are permitted to be based on the procedures specified in Appendix Chapter A5.
- 3. In accordance with ASCE 31 based on the applicable performance level as shown in Table 506.1.1.2.
- 4. Those associated with the BSE-1 Earthquake Hazard Level defined in ASCE 41 and the performance level as shown in Table 506.1.1.2. Where ASCE 41 is used, the design spectral response acceleration parameters S_{xx} and S_{xx} shall not be taken less than seventy-five percent of the respective design spectral response acceleration parameters S_{xx} and S_{xx} defined by the International Building Code and its reference standards.))

NEW SECTION

WAC 51-50-480607 Section 607--Energy conservation.

607.1 Minimum requirements. Level 1 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

NEW SECTION

WAC 51-50-480711 Section 711--Energy conservation.

711.1 Minimum requirements. Level 2 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480807 Section 807--Structural.

- ((807.5.1)) <u>807.4.1</u> Evaluation and analysis. An engineering evaluation and analysis that establishes the structural adequacy of the altered structure shall be prepared by a registered design professional and submitted to the code official. For structures assigned to Seismic Design Category D, the registered design professional shall submit to the code official a seismic evaluation report of the existing building based on one of the procedures specified in Section ((506.1.1.3)) <u>101.5.4.2</u>. This seismic evaluation report shall not be required for buildings in compliance with the benchmark building provisions of ASCE 31, Section 3.2.
- ((807.5.2)) <u>807.4.2</u> Substantial structural alteration. Any building or structure undergoing substantial improvement shall have an evaluation and analysis to demonstrate that the altered building or structure complies with the *International Building Code* for wind loading and with reduced *International Building Code* level seismic forces as specified in Section ((507.1.1.3)) 101.5.4.2 for seismic loading. For seismic considerations, the analysis shall be based on one of the procedures specified in Section ((507.1.1.1)) 101.5.4.
- ((807.5.3)) 807.4.3 Limited structural alteration. Where any building or structure undergoes less than substantial improvement, the evaluation and analysis shall demonstrate that the altered building or structure complies with the loads applicable at the time the building was constructed.

NEW SECTION

WAC 51-50-480808 Section 808--Energy conservation.

808.1 Minimum requirements. Level 3 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481101 Chapter 11--Historic buildings--Section 1101--General.

- 1101.1 Scope. It is the intent of this chapter to provide means for the preservation of historic buildings as defined in Chapter 2. It is the purpose of this chapter to encourage cost-effective preservation of original or restored architectural elements and features and to provide a historic building that will result in a reasonable degree of safety, based on accepted life and fire safety practices, compared to the existing building. Historical buildings shall comply with the provisions of this chapter relating to their repair, alteration, relocation and change of occupancy.
- ((1101.2 Report. A historic building undergoing repair, alteration, or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this chapter, a written report shall be prepared and filed with the code official by a registered design professional when such a report is necessary in the opinion of the code official. Such report shall be in accordance with Chapter 1 and shall identify each required safety feature that is in compliance with this chapter and where compliance with other chapters of these provisions would be damaging to the contributing historic features. In Seismic Design Category D or higher, a structural evaluation describing, at minimum, a complete load path and other earthquake-resistant features shall be prepared. In addition, the report shall describe each feature that is not in compliance with these provisions and shall demonstrate how the intent of these provisions is complied with in providing an equivalent level of safety.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481102 ((Section 1102--Repairs.)) Reserved.

- ((1102.4 Chapter 5 compliance. Historic buildings undergoing repairs shall comply with all of the applicable requirements of Chapter 5, except as specifically permitted in this chapter.
- 1102.5 Replacement. Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height, and size shall be permitted. Such replacements shall not be required to meet the materials and methods requirements of Section 501.2.

EXCEPTION: Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Chapter 24 of the International Building Code.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481104 Alterations.

1104.1 Accessibility requirements. The provisions of Sections 605 and 706 shall apply to buildings and facilities designated as historic structures that undergo alterations, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the professional responsible for the historical documentation of the project, the alternative requirements of Sections 1104.1.1 through 1104.1.4 for that element shall be permitted.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481106 ((Section 1106--Structural.)) Reserved.

((1106.1 General. Historic buildings shall comply with the applicable structural provisions for the work as classified in Chapter 5.

EXCEPTION:

The code official shall be authorized to accept existing floors and approve operational controls that limit the live load on any such floor.))

NEW SECTION

WAC 51-50-481201 Section 1201--General.

1201.1 Conformance. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code, the International Residential Code 51-51 (chapter WAC), 51-52 WAC), International Mechanical Code (chapter International Fire Code (chapter 51-54 WAC), the Uniform Plumbing Code and Standards (chapters 51-56 and 51-57 WAC), the Washington State Energy Code (chapter 51-11 WAC) and the Washington State Ventilation and Indoor Air Quality Code (chapter 51-13 WAC) for new buildings or structures.

EXCEPTION:

Group R-3 buildings or structures are not required to comply if:

1. The original occupancy classification is not changed; and

2. The original building is not substantially remodeled or rehabilitated.

For the purposes of this section, a building shall be

considered to be substantially remodeled when the costs of remodeling exceed 60 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.

SECTION 1202-REQUIREMENTS. This section not adopted.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481301 ((Chapter 13--Performance compliance methods.)) Reserved.

((Section 1301 General.

1301.4.1 Structural analysis. The owner shall have a structural analysis of the existing building made to determine adequacy of structural systems for the proposed alteration, addition, or change of occupancy. The analysis shall demonstrate that the altered building or structure complies with the requirements of Chapter 16 of the International Building Code.

EXCEPTION:

The reduced *International Building Code* level seismic forces as specified in Section 506.1.1.3 shall be permitted to be used for this analysis:))

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481500 ((Chapter 15--Referenced standards.))
Reserved.

((ASCE American Society of Civil Engineers

Standard Reference

Number Title

41-06 Seismic Rehabilitation of Existing Buildings

NFPA National Fire Protection Association

Standard Reference

Number Title

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13-02 Installation of Sprinkler Systems))

NEW SECTION

The following sections of the Washington Administrative Code are decodified as follows:

Old WAC Number	New WAC Number
51-50-0107	51-50-0108
51-50-0707	51-50-0708
51-50-1017	51-50-1018
51-50-1714	51-50-1715
51-50-3408	51-50-3410
51-50-3409	51-50-3411

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 51-50-004

Conflicts with Washington State Ventilation and Indoor Air Quality Code.